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MINOURA*: **Some Hyphomycetes isolated from soil of Nepal****

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ヒフォミセス菌類について**

In continuation to the previous papers described on the Ascomycetes¹⁻³⁾, the following Hyphomycetes are reported from soil of Nepal; *Acrophialophora fusispora*, *Arthrinium* state of *Apiospora montagnei*, *Doratomyces microsporus*, *Pithomyces maydicus*, *Ulocladium botrytis* and the other several species.

1) ***Acrophialophora fusispora*** (Saksena) Samson, in Acta Bot. Neerl. 19, 804 (1970) (Fig. 1, 2)

Colonies on Czapek's solution agar, slow growing, attaining a diam. of about 2.5 cm within two weeks at 28°C; funiculose, faintly zonate, surface white at first, later becoming cream and slightly brownish; reverse of the umber color (Rayner, 6YR/2.0/5.0).

Colonies on PDA growing more rapidly, attaining a diam. of about 4.5 cm within two weeks at 28°C; floccose, fairly deep in all areas up to 2 mm; surface white at first, later becoming brownish; reverse black.

Vegetative hyphae branched, hyaline, 2-3 μ m thick. Conidial fructifications separate phialidic cells and phialides irregularly distributed along the fertile hyphae; phialides 10-17.5 \times 2-4.5 μ m, flask-shaped, hyaline to subhyaline; phialoconidia brown, dry basipetal chain, 1-celled, ovoid to ellipsoidal but mostly fusiform, with spiral sculpture, 6.0-8.6 \times 3.8-5.6 μ m. Thermotolerant¹¹⁾.

Hab. from soil No. 53 (Warlibhnjag): HUT 5102

2) ***Arthrinium* state of *Apiospora montagnei*** Sacc., in Nuovo G. Bot. Ital. 7, 306 (1875) (Fig. 3)

[See H. J. Hudson, 1963, in Trans. Brit. Mycol. Soc., 46, 19-23]

Colonies on malt extract agar attaining a diam. of 7-8 cm in 7 days at

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28°C, floccose, white, aerial mycelium abundant, conidial production very scant. Reverse colorless.

Conidia lenticular, pale brown, often with longitudinal germ slit, $6.2-9.0 \times 4.0-6.0 \mu\text{m}$.

Hab. from soil No. 138 (Garatabule): HUT 5103

This genus is characterizing by the presence of conidiophore mother cells^{6,8-10}. This feature, however, was not ascertained with the specimens of cultures on PDA, malt extract agar, hay infusion agar and leaves of bamboo, etc. In spite of these results, this isolate was treated as above by the septate conidiophores and conidia having germ slit.

3) **Doratomyces microsporus** (Sacc.) Morton at Smith, in Mycol. Pap. No. 86, 77-80 (1963) (Fig. 4, 5)

Colonies on malt extract agar, grey to almost black. Synnemata up to $700 \mu\text{m}$ high, usually with long cylindrical heads. Conidia usually ovoid, with truncate base and acutely pointed apex, $3.5-7.0 \times 3.0-4.0 \mu\text{m}$.

Annellation was confirmed by interference-phase-microscopic observations.

Hab. from soil No. 11 (Kathmandu): HUT 5104

This isolate coincides with the description of a few authors^{6,7,12}.

4) **Pithomyces maydicus** (Sacc.) M.B. Ellis, in Mycol. Pap. No. 76, 15 (1960) (Fig. 6, 7)

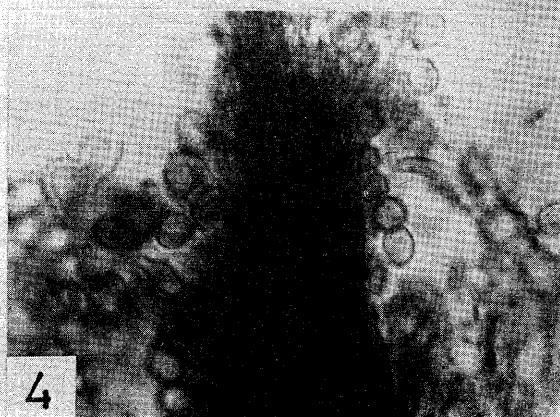
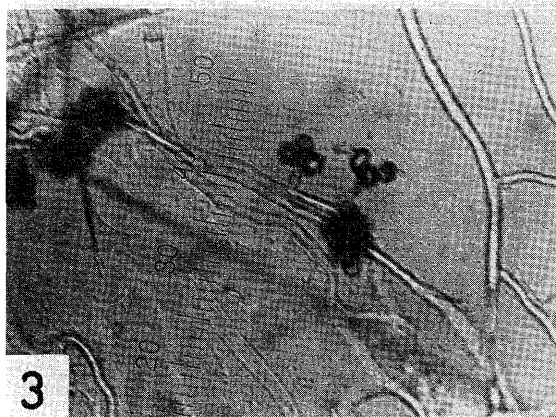
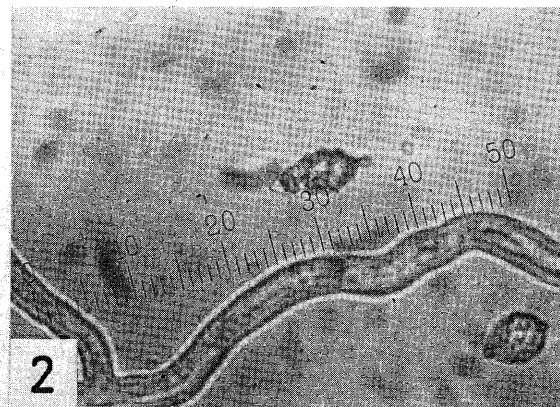
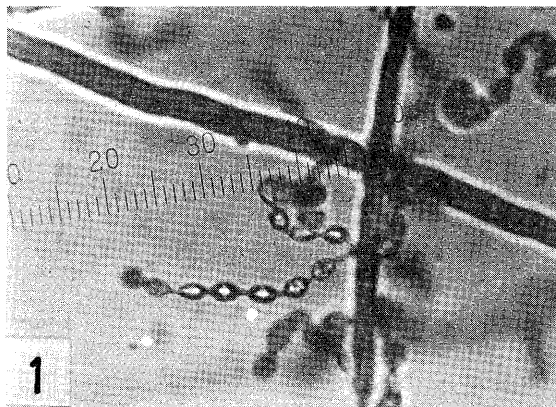
Colonies on malt extract agar attaining a diam. of 5 cm in 7 days at 28°C, funiculose, glaucous (Rayner, 5G/8.0/1.5). Reverse dull green (Rayner, 5GY/4.0/3.0). Conidiophore short, peg-like, single, brown, smooth. Aleurioconidia formed singly as blown out ends at the apex of each conidiophore, with transverse septa, the middle cell sometimes divided by 1 or occasionally 2 longitudinal septa, brown to malachite green (Rayner, 4G/6.0/5.0), verruculose, $11-21 \times 6-11 \mu\text{m}$.

Hab. from soil No. 63 (Drivertol): HUT 5100

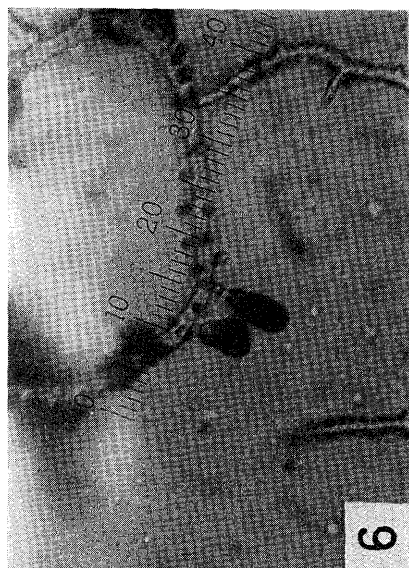
This isolate coincides with the description of several authors^{4-7,13}.

5) **Ulocladium botrytis** Preuss, in Linnaea, 24, 111 (1851) (Fig. 8)

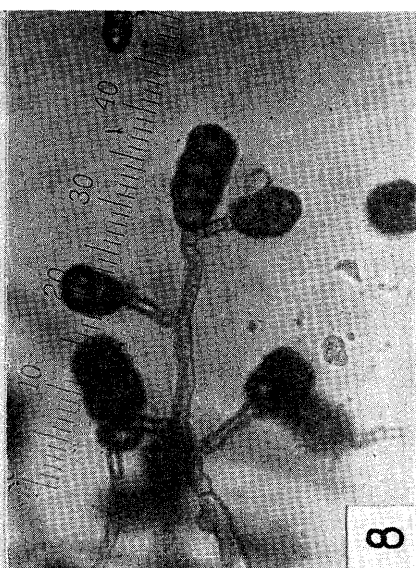
Colonies on malt extract agar, extensive, dark brown to black, velvety. Conidiophore geniculate, brown, up to $200 \mu\text{m}$ long, $3-5 \mu\text{m}$ thick. Vegetative



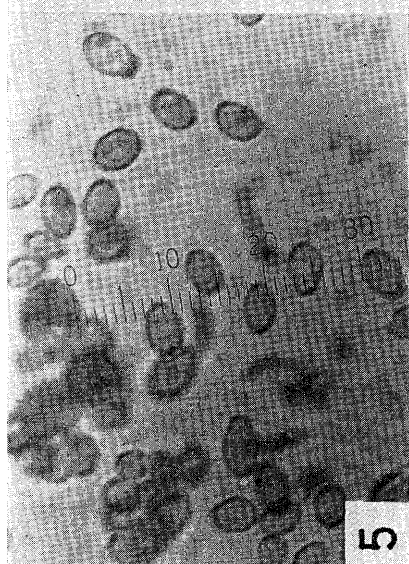
1. *Acrophialophora fusispora*. Conidial structures (one scale : $2.5\mu\text{m}$). 2. *Acrophialophora fusispora*. Conidia (one scale : $1\mu\text{m}$). 3. *Arthrinium* state of *Apiospora montagnei*. Conidial structures (one scale : $2.5\mu\text{m}$). 4. *Doratomyces microsporus*. Synnemata (one scale : $1\mu\text{m}$).



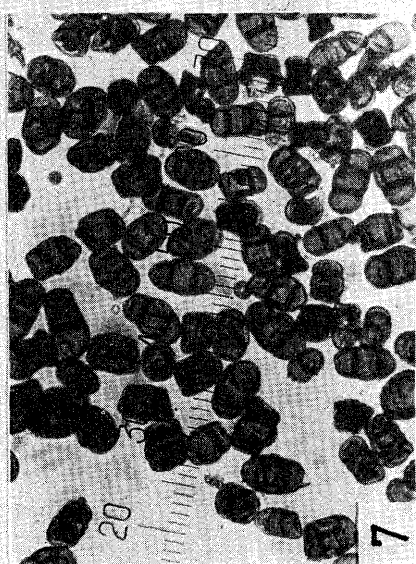
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8



5



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5. *Doratomyces microsporus*. Conidia (one scale : $1\mu\text{m}$). 6. *Pithomyces maydis*. Conidial structures (one scale : $2.5\mu\text{m}$). 7. *Pithomyces maydis*. Conidia (one scale : $2.5\mu\text{m}$). 8. *Ustiladium botrytis*. Conidial structures (one scale : $2.5\mu\text{m}$).

mycelia yellow to golden yellow, smooth, septate, 3-6.8 μm in diam. Conidia solitary, ovoid to ellipsoidal, yellow brown to golden brown, with 2-3 transverse septa, 1 or 2 longitudinal or strongly oblique septa, commonly terminating in a minute apiculus, apex rounded, 16-23 \times 11-15 μm .

Hab. from soil No. 111 (Chanewa): HUT 5105

This isolate coincides with the description of a few authors^{5-7,14)}.

6) The other Hyphomycetes

The precise descriptions of species indicated in Table 1, were abbreviated except their valuable literature and distribution.

Table 1

Name of species	From soil of	References
<i>Alternaria alternata</i> (Fr.) Keissler	Naudaranna	4, 5, 6, 7
<i>Aspergillus versicolor</i> (Vuill.) Tiraboschi	Nagazun	15
<i>Cephalosporium acremonium</i> Cda. var. <i>cereum</i> Sukapure et Thirum	Patan	4, 5, 6, 7, 16
<i>Chrysosporium pannorum</i> (Link) Hughes	Patan	4, 5, 6, 7, 17
<i>Fusarium oxysporum</i> Schlecht.	Patan, Drivertol Garatabule	4, 5, 6, 7, 18
<i>Geotrichum candidum</i> Link	Khanikhola	4, 5, 6, 7, 19
<i>Humicola grisea</i> Traaen	Patan	4, 5, 6, 7, 20
<i>Humicola nigrescens</i> Omvik	Cyomuron	4, 5, 6, 7, 21
<i>Penicillium lilacinum</i> Thom	Patan	22
<i>Penicillium vinaceum</i> Gilman et Abbott	Hिताуда	22

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1973年12月から1974年1月にかけて広島大学ヒマラヤ学術調査隊に参加し、約230の土壌試料を持ち帰りその菌類の分布を調査した。その結果、多数の子のう菌類、不完全菌類を分離同定し、子のう菌類については既に発表済みである。今回、不完全菌類、特にヒフォミセス菌類について発表する。

□服部新佐博士に朝日賞 服部植物研究所理事長の服部新佐博士に、このほど昭和51年度朝日賞（朝日新聞社）がおくられ、去る1月19日にこの受賞式が東京でおこなわれた。受賞理由は「日本の蘚苔類学及び植物分類学への貢献」で、国際的評価の高い財団法人服部植物研究所の運営、同研究所報告の編集発行、これまでの博士の学問的業績、後継研究者の育成などを評価されたものである。今年は服部植物研究所の創立30周年にもあたり、なによりもの喜びであり、おいおい申し上げたい。服部博士は苔類を専攻されているとはいえ、植物分類学全体の発展にも種々腐心されており、今回の受賞は誠に当を得たものである。

なお、植物分類学関係でこれまで朝日賞を受けられたのは牧野富太郎博士（昭和11年度；日本植物分類の研究）、三木茂博士（昭和25年度；メタセコイアの発見）、大井次三郎博士（昭和46年度；「日本植物誌」の完成にいたる植物分類学への貢献）で、服部博士が4人目である。

（井上 浩）